Docket No. 8029-1073 Appln. No. 10/528,337

## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## LISTING OF CLAIMS:

1. (currently amended) A liquid fuel supply type fuel
cell, comprising:

a solid electrolyte film,

an anode electrode disposed on one surface of the solid  $\ensuremath{\text{electrolyte}}$  film,

a cathode electrode disposed on the other surface of the solid electrolyte film, and

a passage for feeding air to the cathode electrode,

wherein [[an]]  $\underline{a}$  separation membrane including a material having an oxygen/nitrogen separation coefficient more than one is disposed between the cathode electrode and the passage, and

## 2. (canceled)

3. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation

membrane is a polysiloxane-based polymer film or a polyimidebased polymer film.

- 4. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation membrane is a polyorganosiloxane-based polymer film.
- 5. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation membrane includes a material having an oxygen/nitrogen separation coefficient equal to or more than two.
- 6. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation membrane includes a material having a water vapor transmission coefficient equal to or more than  $0.6~\rm x~10^{-6}~\rm cm^3\,(STP)\,cm/cm^2\cdot sec\cdot cmHg$ .
- 7. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the liquid fuel supplied to the anode electrode is methanol.
  - 8. (new) A liquid fuel supply fuel cell, comprising:
    a layer of solid electrolyte film;

an anode electrode formed as a layer on one surface of the solid electrolyte film;

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a cathode electrode formed as a layer on an opposing surface of the solid electrolyte film;

a separation membrane including a material having an oxygen/nitrogen separation coefficient more than one formed as a layer on said cathode electrode;

a separator spaced apart by a space from said separation membrane; and

a passage for feeding air to the cathode electrode formed in said space between said separation membrane and said separator.

- 9. (new) The liquid fuel supply fuel cell in accordance with claim 8, wherein the separation membrane is a polysiloxane-based polymer film or a polyimide-based polymer film.
- 10. (new) The liquid fuel supply fuel cell in accordance with claim 8, wherein the separation membrane is a polyorganosiloxane-based polymer film.
- 11. (new) The liquid fuel supply type fuel cell in accordance with claim 8, wherein the separation membrane includes a material having an oxygen/nitrogen separation coefficient equal to or more than two.

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- 12. (new) The liquid fuel supply type fuel cell in accordance with claim 8, wherein the separation membrane includes a material having a water vapor transmission coefficient equal to or more than  $0.6 \times 10^{-6} \text{ cm}^3 (\text{STP}) \text{ cm/cm}^2 \cdot \text{sec} \cdot \text{cmHg}$ .
- 13. (new) The liquid fuel supply type fuel cell in accordance with claim 8, wherein the liquid fuel supplied to the anode electrode is methanol.
  - 14. (new) A liquid fuel supply fuel cell, comprising: a solid electrolyte film;
- an anode electrode disposed on one surface of the solid electrolyte film;
- a cathode electrode disposed on an opposing surface of the solid electrolyte film;
- a separation membrane including a material having an oxygen/nitrogen separation coefficient more than one is overlying and in direct contact with the cathode electrode; and
- a passage overlying the separation membrane for feeding air to the cathode electrode, so that said separation membrane is between said cathode electrode and said passage.